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|  | **Biology** | **شعار-القسم** |
| **Worksheet-2-** |
| Photosynthesis |

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| Name: Class: 8 /……........ | |
| Book pages:332-335 | |
|  | Date: |
| 8.10.2 | Core Standard number |
| 1.Know that green plants make their own food by photosynthesis.  2.know that water and carbon dioxide are required for photosynthesis.  3. know that oxygen and glucose are product for photosynthesis | Learning Objectives  Logo + text 2 |

1. In the 17th Century, A Belgian physician, van Helmont, set up an experiment in which he planted a willow sapling in a weighed amount of soil The soil was watered but nothing else was added. After 5 years, the tree had gained 74kg in weight but the soil had lost only 0.052Kg.
2. Did the plant's food come from the soil? Explain your answer.

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1. What was available for the plant?

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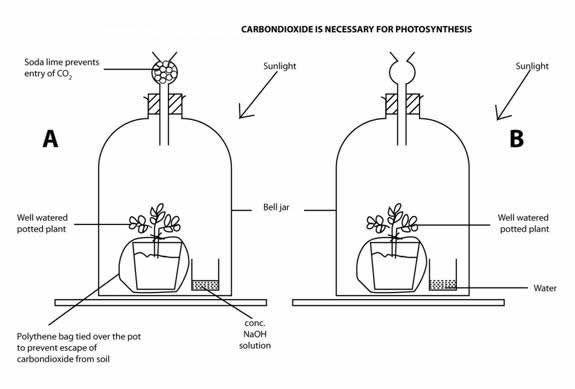
1. Did the plant gets its food from the soil? If not from where?

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1. Name the process by which plants make their own food.

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1. Set up the experiment as shown below and expose to light for 2-6 hours.



Obtain a leaf from each plant and test it for starch.

Results: Leaf from jar A stains brown.

Leaf from jar B turns black or dark blue.

( If iodine turns to black or dark blue : starch is formed )

1. Compare the jar A and B in terms of carbon dioxide.

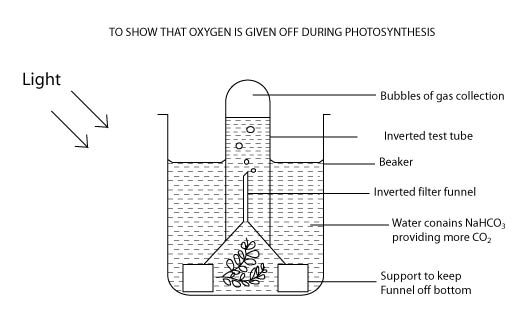
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1. How photosynthesis is related to the starch test?

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1. Is carbon dioxide necessary for photosynthesis?

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1. Set up the experiment as shown below. Expose it to light for about 2 hours.  
   (The supports ensure circulation of air. Sodium hydrogen carbonate adds carbon dioxide.)

Test any gas collected in the test tube using a glowing splint.  
  
**Observations**

A gas is collected in the test tube.  
  
The gas re-lights a glowing splint or makes it glow brighter.

1. What is the gas formed in the test tube?

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1. What do you conclude?

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